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REMARKS

**I. Status of the Application.**

Claims 1-13 of the Application were pending as of the date of the Office Action. In the Office Action, the Examiner:

- (a) Objected to the drawings under 37 C.F.R. 1.83(a) for allegedly not showing every feature of the claimed invention;
- (b) Rejected claims 1 and 4-6 under 35 U.S.C. §102(b) as being allegedly anticipated by U.S. Patent No. 5,256,222 to Shepherd et al. ("Shepherd");
- (c) Rejected claims 2-3 under 35 U.S.C. §103(a) as being allegedly obvious over Shepherd in view of U.S. Patent No. 5,505,771 to Chihara et al. ("Chihara");
- (d) Rejected claims 7-10 under 35 U.S.C. §103(a) as being allegedly obvious over Shepherd in view of taking Official Notice; and
- (e) Rejected claims 11-13 under 35 U.S.C. §103(a) as being allegedly obvious over Shepherd in view of U.S. Patent No. 4,569,715 to Honda ("Honda");

In this response, Applicant amends claim 1, adds claims 14-19, adds Figure 3 and amends the specification. Applicant respectfully submits that the foregoing amendments and following remarks incorporated herein overcome the Examiner's rejections of and objections to the application.

**II. Applicant's Amendments Do Not Constitute New Matter.**

Applicant respectfully submits that the amendments to claim 1 and to the specification, as well as the addition of claims 14-19 and Figure 3 do not add new matter to the Application. The amendment to claim 1 and the addition of claims 14-19 are supported generally by the

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Application as originally filed. For example, support for these amendments can be found in original paragraphs 31 and 42-45. The amendments to the specification are merely made to make appropriate reference to added Figure 3 and to correct typographical errors. As requested by the Examiner, the Applicants have added another view of the mixer and extrusion die in order for the Examiner to be able to further determine the relationship between the two. The Figure 3 is supported and described throughout the originally filed Application. For example, support of Figure 3 can be found in paragraphs 31 and 42-45 as well as Figures 1 and 2. The added Figure merely gives the Examiner another view of the already described mixer and extrusion die for this exemplary embodiment. For the above-listed reasons, Applicant respectfully submits that all the amendments are supported by the specification, as originally filed, and do not constitute new matter. Accordingly, Applicant respectfully requests acceptance of these amendments.

**III. The Objections to the Drawings Should Be Withdrawn.**

The Examiner objected to the Figures under 37 C.F.R. 1.83(a) for allegedly not showing every feature of the invention specified in the claims. As requested by the Examiner in a teleconference with the undersigned, the Applicant has added Figure 3 to give the Examiner another view of the mixer and the extrusion die of this exemplary embodiment. For these reasons, Applicant respectfully submits that the Examiner's objections to the Figures have been overcome and respectfully request that the objections be withdrawn.

**IV. The Rejection of Claims 1 and 4-6 Under 35 U.S.C. §102(b) as Being Anticipated By Shepherd Should Be Withdrawn.**

Applicant respectfully submits that the rejections of claims 1 and 4-6 under 35 U.S.C. §102(b) should be withdrawn because Shepherd does not disclose all the limitations of claims 1

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and 4-6. A rejection under 102(b) can be overcome by showing that the prior art does not disclose all the limitations of the claims. MPEP §706.02(b). Shepherd discloses in Figure 3 a schematic illustration of the process of making the inventive board of Shepherd. The process uses a storage tank 22 of ore, a water source 26, a binder source 38 and a setting agent source 30 to feed a mixer 24 with the necessary ingredients to make the core of the board. (Col. 5, ll. 29-46). After the mixer 24 thoroughly mixes mixture 12, the mixture is deposited onto a moving web 34 by a feed hopper 32. (Col. 5, ll. 61-67).

Applicant respectfully submits that Shepherd disclose a standard apparatus for making wallboard and does not disclose all the elements of claims 1 and 4-6. For example, Shepherd does not disclose an "extrusion die (that) has secondary inlets" for the introduction of the gypsum ingredients", as claimed in claim 1. As explained above, Shepherd's elements 26, 28 and 30 feed the mixer not the extrusion die. Applicant respectfully submits that Shepherd does not disclose this element, nor does the Examiner cite any portion of Shepherd that discloses the claimed "extrusion die (that) has secondary inlets" of claim 1.

Shepherd also does not disclose "an extrusion die comprising . . . a die exit . . . wherein . . . the die exit is dimensioned to have a cross-section that is substantially identical to that of the gypsum wallboard core," as claimed in amended claim 1. Shepherd merely states that the feed hopper 32 deposits the mixture 12 on the moving web and does not mention anything regarding the dimensions of the feed hopper. Further, as shown in Figure 3 of Shepherd, the mixture 12 is deposited on the web 34 by feed hopper 32 at a substantially greater thickness than the produced wallboard. As explained in Shepherd, mixture 12 exits the hopper 32 uniformly

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across the width of the web 34, is consolidated to an initial thickness by the rolls 46 and 48 and then is consolidated to the desired thickness and density by press rolls 54 and 56. (Col. 6, ll. 10-24). Accordingly, Shepherd does not disclose the claimed die exit that "is dimensioned to have a cross-section that is substantially identical to that of the gypsum wallboard core", as claimed in claim 1.

Accordingly, Applicant respectfully submits that the rejection of claim 1 under 35 U.S.C. §102(b) as being anticipated by Shepherd should be withdrawn because Shepherd does not disclose all the limitations of claim 1. Moreover, Applicant respectfully submits that the rejection of claims 4-6 under 35 U.S.C. §102(b) as being anticipated by Shepherd should be withdrawn because claims 4-6 depend from and incorporate all the limitations of claim 1. Thus, Applicant respectfully requests allowance of claims 1 and 4-6.

V. The Rejections of Claims 2-3, Claims 7-10, and Claims 11-13 Under 35 U.S.C. §103(a) Should Be Withdrawn.

Applicant respectfully submits that the rejection of claims 2-3, claims 7-10 and 11-13 under 35 U.S.C. §103(a) should also be withdrawn because the claims depend from an allowable base claim. "If an independent claim is not obvious under 35 U.S.C. §103, then any claim depending therefrom is not obvious." MPEP 2143.03 (citing *In re Fine*, 837 F.2d 1382, 1385 (C.C.P.A. 1970)). "To establish prima facie obviousness of the claimed invention, all of the claim limitations must be taught or suggested by the prior art." MPEP 2143.03 (citing *In re Royka*, 490 F.2d 981 (C.C.P.A. 1974)).

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A. The Rejection of Claims 2-3 Under 35 U.S.C. §103(a) Should Be Withdrawn.

Applicant respectfully submits that the rejection of claims 2-3 under 35 U.S.C. §103(a) as being obvious over Shepherd in view of Chihara should be withdrawn because the claims depend from an allowable base claim. As noted above, Shepherd does not disclose, teach or suggest all the limitations of claim 1. Moreover, like Shepherd, Chihara does not disclose, teach or suggest an "extrusion die (that) has secondary inlets for the introduction of the gypsum ingredients", or "an extrusion die comprising . . . a die exit . . . wherein . . . the die exit is dimensioned to have a cross-section that is substantially identical to that of the gypsum wallboard core," as claimed in claim 1. Accordingly, Applicant respectfully seeks the allowance of claims 2-3 because the claims depend from allowable base claim 1 which is not obvious in view of Shepherd and Chihara.

B. The Rejection of Claims 7-10 Under 35 U.S.C. §103(a) Should Also Be Withdrawn.

The Examiner's Official Notice does not render the claims obvious and the rejection based upon the Official Notice and Shepherd should be withdrawn. As explained above, Shepherd does not disclose, teach or suggest all the limitations of claim 1. Nor does the Official Notice by the Examiner support a conclusion of obviousness of claim 1. Most prior art systems, as shown in Shepherd, extrude the material into a flat sheet (i.e., "mixture 12 exits the discharge hopper 32 generally uniformly across the width of the web"). However, the mixture in Shepherd or any other known prior art is not extruded by "an extrusion die comprising . . . a die exit . . . wherein . . . the die exit is dimensioned to have a cross-section that is substantially identical to that of the gypsum wallboard core," as claimed in claim 1. Rather, as demonstrated

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by Shepherd, a mixture is deposited on the web at a greater thickness than the produced wallboards and rolls (i.e. rolls 46 and 48 and then press rolls 54 and 56) are used to compact the mixture to the desired dimensions and density. Moreover, the Official Notice does not support a conclusion of obviousness in claim 1 because extruding a flat sheet does not teach, suggest or disclose an "extrusion die (that) has secondary inlets for the introduction of the gypsum ingredients", as claimed in claim 1. Accordingly, Applicant respectfully seeks the allowance of claims 7-10 because the claims depend from allowable base claim 1 which is not obvious over Shepherd in view of the Official Notice.

C. The Rejection of Claims 11-13 Under 35 U.S.C. §103(a) Should Be Withdrawn.

Applicant respectfully submits that the rejection of claims 11-13 under 35 U.S.C. §103(a) as being obvious over Shepherd in view of Honda should also be withdrawn because the claims depend from an allowable base claim. As noted above, Shepherd does not disclose, teach or suggest all the limitations of claim 1. Moreover, Honda also does not disclose, teach or suggest an "extrusion die (that) has secondary inlets for the introduction of the gypsum ingredients", or "an extrusion die comprising . . . a die exit . . . wherein . . . the die exit is dimensioned to have a cross-section that is substantially identical to that of the gypsum wallboard core," as claimed in claim 1. Accordingly, Applicant respectfully seeks the allowance of claims 11-13 because the claims depend from allowable base claim 1 which is not obvious over Shepherd in view of Honda.

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**VI. Applicant Respectfully Requests Allowance of New Claims 14-19.**

Applicant respectfully requests allowance of new claims 14-19 because none of cited references disclose, teach or suggest all of the limitations of claims 14-19. For example, none of the cited references disclose, teach or suggest "an extrusion die having a die inlet that is connected to the discharge end of the mixer, a die exit dimensioned to have a cross-section that is substantially identical to the gypsum wallboard core, and a manifold disposed between the die inlet and the die exit", as claimed in claims 14-19. Accordingly, Applicant respectfully requests acceptance and allowance of claims 14-19.

**VII. Applicant Petitions for An Extension of Time of One (1) Month.**

Applicant hereby petitions for an extension of time of one (1) month, under 37 C.F.R. § 1.136(a), thereby extending the deadline for response to Thursday, April 14, 2005. Applicant authorizes payment for this extension in the amount of \$120.00 to be charged to deposit account 09-0007.

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CONCLUSION

For all of the foregoing reasons, it is respectfully submitted that claims 1-19 are allowable claims. Allowance of this Application is therefore respectfully requested. In the event Applicant has inadvertently overlooked the need for payment of any fees, Applicant conditionally petitions therefore, and authorize any deficiency to be charged to deposit account 09-0007. When doing so, please reference the above-listed docket number.

Respectfully submitted,

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Date: 4/12/05

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Enclosure: Fax Transmittal Sheet  
New Figure